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10/716,689

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EXAMINER

WYSZYNSKI, AUBREY H

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|------------------------------------|--|
| Office Action Summary | Application No. 10/716,689 | Applicant(s) SEOK ET AL. | |
| | Examiner AUBREY H. WYSZYNSKI | Art Unit 2434 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/26/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The response of 9/26/08 was received and considered.
2. Claims 1-15 are pending
3. The IDS of 09/26/08 was received and considered.

Response to Arguments

4. Applicant's arguments filed 9/26/08 have been fully considered but they are not persuasive.
5. Applicant argues the Double Patenting rejection. Applicant states "The Examiner asserts that although the conflicting claims are not identical they are not patentably distinct from each other because of U.S. Patent No. 6,615,319." The Examiner is confused by this statement because there is no mention of U.S. Patent No. 6,615,319 in the Double Patenting rejection. However, Applicant also states the claims in the '286 co-pending application are distinct from the present invention . The examiner respectfully disagrees. The claims in the present application appear to be a broader version of the claims in the '286 co-pending application. Applicant also mentions submitting a terminal disclaimer to obviate the outstanding obviousness-type double patenting rejection. However, no terminal disclaimer was filed with the current response. Therefore, the examiner has maintained the Double Patenting rejection.
6. Applicant argues "Wasilewski does not disclose "an access control means for generating access control information for access control service and a control word", as recited in claims 1, 5 and 12". Applicant also argues "Wasilewski merely discloses the

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control word generator 203 generating the control word (CW) 202." The examiner respectfully disagrees. Wasilewski discloses generating a control word in col. 4, lines 40-63, "Control word 117 is produced by control word generator 119 from information contained in entitlement control message 107 and information from authorization information 121 stored in set-top box 113. For example, authorization information 121 may include a key for the service and an indication of what programs in the service the subscriber is entitled to watch. If the authorization information 121 indicates that the subscriber is entitled to watch the program of encrypted instance 105, control word generator 119 uses the key together with information from ECM 107 to generate control word 117." and in col. 6, lines 32-35, "The CW 202 is generated by control word generator 203." Wasilewski continues to disclose generating access control information in col. 6, line 42, "The CW is then combined into an ECM 107 with other service-related information. The ECM 107 is authenticated by Control Word Encrypt & Message Authenticate function 204 which produces a message authentication code using a keyed-hash value derived from the message content combined with a secret which can be shared with the receiving set-top box 113. This secret is preferably part or all of the MSK 208. The message authentication code is appended to the rest of the ECM 107. The CW 202 is always encrypted before being sent along with the other parts of the ECM to MUX 200." The Examiner is not equating the control word generator 203 to the "access control information". The examiner is relying on the ECM 107 in combination with the message authentication code and MSK 208 to teach "access control information".

Applicant argues there is no teaching or suggestion of means of generating any of the flags equivalent to the CCI, BF and RI. The examiner respectfully disagrees. Wasilewski discloses generating the flags in fig. 17 and associated text, please see the rejection below for further clarification. Also, the examiner would like to point out that although the claims are interpreted in view of the specification, the claim limitations are also given the broadest interpretation as to one of ordinary skill in the art. The terms "broadcasting flag", "copy control information" and "retention information" are not specially defined in the claim language. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Double Patenting

7. Claims 1-4 of this application conflict with claims 1 and 4 of Application No. 10/724,286. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

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and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4 of copending Application No. 10/724,286. Although the conflicting claims are not identical, they are not patentably distinct from each other because: Please see the chart below for a claim comparison.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

| Application 10/716,689 | Application 10/724,286 |
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| 1. An apparatus for controlling storage and playback of digital broadcasting contents in a transmitter of a digital broadcasting | 1. A broadcasting server system for protecting and managing digital broadcasting contents, comprising: a |

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| environment, comprising; an access control means for generating access control information for access control service and a control word; a copy control information (CCI) generation means for generating copy control information; a broadcasting flag (BF) generation means for generating broadcasting flag; a retention information (RI) generation means for generating retention information; a watermarking means for receiving the CCI, the BF and the RI and watermarking an uncompressed media signal with the CCI, the BF and the RI to thereby generate a watermarked media signal; a media encoding means for compressing the watermarked media signal; a multiplexing means for receiving and multiplexing the watermarked and compressed media signal, the access control information, the CCI, the BF, and the RI to thereby generate multiplexed | control means for generating access control information and a control word based on subscriber information, the access control information including CAT, entitlement control message (ECM) and entitlement management message (EMM); an additional data generation means for generating additional data including use control metadata, tool information metadata, and content purchase information metadata to protect and manage the digital broadcasting contents; a watermarking means for receiving an identification of a broadcasting content, which is referred to as a content ID, and the use control metadata, and watermarking an audio/video (A/V) media signal by using the content ID and the use control metadata as watermarks, the use control metadata including copy control information (CCI), broadcasting flag (BF) and retention information (RI); a media |
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| <p>transport stream; and a scrambling means for scrambling the multiplexed transport stream based on the control word and transmitting the scrambled transport stream.</p> | <p>encoding means for compressing the watermarked A/V media signal; an encrypting means for encrypting the compressed A/V media signal; a multiplexing means for receiving and multiplexing the compressed and encrypted A/V media signal to thereby output a media transport stream; a re-multiplexing means for receiving and re-multiplexing the media transport stream, the additional data and the access control information to thereby output a re-multiplexed signal; and a scrambling means for scrambling the re-multiplexed signal by using the control word.</p> |
| <p>2. The apparatus as recited in claim 1, wherein the CCI is information for determining whether a broadcasting content can be copied.</p> <p>3. The apparatus as recited in claim 1, wherein the BF is information for</p> | <p>4. The system as recited in claim 1, wherein the use control metadata include the CCI, the BF and the RI, determines from the CCI whether a broadcasting content can be copied, identifies from the BF whether the content is a broadcasting content, and indicates in the RI how long</p> |

| | |
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| determining whether a content is a broadcasting content. | the broadcasting content can be retained being stored in a hard disk of the receiver. |
| 4. The apparatus as recited in claim 1, wherein the RI indicates retention time of a broadcasting content when the broadcasting content is stored in a hard disk. | |

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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11. Claims 1-15 rejected under 35 U.S.C. 102(b) as being anticipated by Wasilewski et al. US 6,157,719.

Regarding claim 1, Wasilewski discloses an apparatus for controlling storage and playback of digital broadcasting contents in a transmitter of a digital broadcasting environment (fig. 6, #607), comprising;

an access control means for generating access control information for access control service and a control word (col. 4, lines 40-63 and col. 6, lines 24-37);

a copy control information (CCI) generation means for generating copy control information (fig. 17, flags field 1705, flag 7, whether the right to copy the event has been purchased and col. 31, lines 24-25);

a broadcasting flag (BF) generation means for generating broadcasting flag (fig. 15, CAA Flags 1511 and associated text and fig. 17, #1705);

a retention information (RI) generation means for generating retention information (col. 31, lines 13-30 and 48-53);

a watermarking means (encoding a packet identifier) for receiving the CCI, the BF and the RI and watermarking an uncompressed media signal with the CCI, the BF and the RI to thereby generate a watermarked media signal (col. 31, lines 13-30);

a media encoding means for compressing the watermarked media signal (fig. 7, #704 and fig. 4, #327, col.18, lines 52-67);

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a multiplexing means for receiving and multiplexing the watermarked and compressed media signal, the access control information, the CCI, the BF, and the RI to thereby generate multiplexed transport stream (col. 18, lines 36-51); and

a scrambling means for scrambling the multiplexed transport stream based on the control word and transmitting the scrambled transport stream (encryption, col. 2, lines 43-47 and col. 18, lines 62-67).

Regarding claims 2-4, Wasilewski discloses apparatus as recited in claim 1, wherein the CCI is information for determining whether a broadcasting content can be copied (col. 31, lines 23-24), wherein the BF is information for determining whether a content is a broadcasting content, wherein the RI indicates retention time of a broadcasting content when the broadcasting content is stored in a hard disk (col. 31, lines 13-30 and 48-53).

Regarding claims 5 and 10-11, Wasilewski discloses apparatus for controlling storage and playback of digital broadcasting contents in a receiver of a digital broadcasting environment, comprising:

a personal information providing means(col. 6, lines 24-55) for providing personal (control word, col. 6, lines 32-37) information to decode a scrambled transport stream;

a descrambling means for descrambling the scrambled transport stream based on the personal information (fig. 22 and col. 35, lines 44-67);

a control information processing means for processing a copy control information (CCI),

a broadcasting flag (BF), a retention information (RI), which are storage and playback

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control information included in the descrambled transport stream, and storing and playing back the broadcasting content (fig. 16, col. 31, lines 13-53);

an encrypting means for encrypting the broadcasting content to be stored (fig. 7, #704 and fig. 3, #327); a storing means for storing the encrypted broadcasting content;

a decrypting means for decrypting the stored broadcasting content; a decoding means for decoding the descrambled and compressed transport stream (col. 32, lines 28-53);

and a playback allowing means for abstracting the CCI, the BF and the RI, which are watermarks, from the decoded transport stream, comparing the abstracted watermark information with the storage and playback control information, and determining whether to allow playback of the broadcasting content (col. 30, lines 58-67, col. 31, lines 1-30).

Regarding claims 6-9, Wasilewski discloses the apparatus as recited in claim 5, wherein the control information processing means changes the CCI included in the transport stream based on the kind of a broadcasting content, when the broadcasting content is stored, wherein the control information processing means checks the BF included in the transport stream based on the kind of a broadcasting content, and stores and plays back the broadcasting wherein the control information processing means checks whether the retention period is valid by checking the RI included in the transport stream based on the kind and service of a broadcasting content, and plays back the broadcasting content, wherein the CCI indicates whether a broadcasting content can be copied and the BF indicates whether the content is an authentic broadcasting content, while the RI indicates retention time of a broadcasting content stored in the hard disk of

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the receiver (col. 31, lines 13-53 and col. 30, lines 58-67).

Regarding claim 12, Wasilewski discloses an apparatus for storing and playing back digital broadcasting contents, comprising: a control information providing means (col. 6, lines 24-55) for generating control information for recording storage (col. 6, lines 32-37), temporary storage, and playback of a broadcasting content, using the control information as watermarking information (encoding a packet identifier, fig. 7, #709 and col. 32, lines 2-16), multiplexing and scrambling the broadcasting content including the control information (col. 18, lines 36-51), and outputting a scrambled transport; and a storing and playback means for storing the broadcasting content by using the control information, comparing the control information stored together with the broadcasting content with control information added as watermarks, and determining whether to play back the broadcasting content (col. 30, lines 58-67, col. 31, lines 1-30).

Regarding claim 13, Wasilewski discloses the apparatus as recited in claim 12, wherein the control information includes CCI information for determining whether the broadcasting content can be copied (col. 31, lines 23-24), BF information for determining whether the broadcasting content is an authentic broadcasting content, and RI information for indicating retention time of the broadcasting content stored in a hard disk of the storing and playback means (col. 31, lines 13-53).

Regarding claim 14, Wasilewski discloses the apparatus as recited in claim 12, wherein

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the control information providing means includes; an access controlling means (col. 6, lines 24-55) for generating access control information for access control service and a control word (col. 6, lines 32-37); a CCI generation means for generating the CCI (col. 31, lines 13-30); a BF generation means for generating the BF (fig. 17, #1705); a RI generation means for generating the RI (col. 31, lines 13-30 and 48-53); a watermarking means for receiving the CCI, the BF, and the RI, and watermarking an uncompressed media signal by using the CCI, the BF, and the RI as watermarks (fig. 7, #709); an encoding means for compressing the watermarked media signal (fig. 7, #704 and fig. 4, #327 and col. 18, lines 52-67); a multiplexing means for receiving and multiplexing the watermarked and compressed media signal, the access control information, the CCI, the BF, and the RI (col. 18, lines 36-51); and a scrambling means for scrambling a multiplexed transport stream based on the control word and transmitting the scrambled transport stream fig. 7, #704 and fig. 3, #327).

Regarding claim 15, Wasilewski discloses the apparatus as recited in claim 12, wherein the storing and playback means includes: a personal information providing means for providing personal information for decoding the scrambled transport stream; a descrambling means for descrambling the scrambled transport stream based on the personal information; a control information processing means for processing the CCI, the BF and the RI, which are the storage and playback control information included in the descrambled transport stream, and storing and playing back the broadcasting content; an encrypting means for encrypting the broadcasting content to be stored; a

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storing means for storing the encrypted broadcasting content; a decrypting means for decrypting the stored broadcasting content; a decoding means for decoding the descrambled and compressed transport stream; and a playback allowing means for abstracting the CCI, the BF and the RI, which are watermarks, from the decoded transport streams compares the abstracted watermark information with the storage and playback information, and determining whether to allow playback of the broadcasting content (fig. 22 and col. 35, lines 44-67, fig. 19 and col. 32, lines 28-53).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUBREY H. WYSZYNSKI whose telephone number is

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(571)272-8155. The examiner can normally be reached on Monday - Thursday, and alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571)272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aubrey H Wyszynski/
Examiner, Art Unit 2434
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Supervisory Patent Examiner, Art Unit 2434